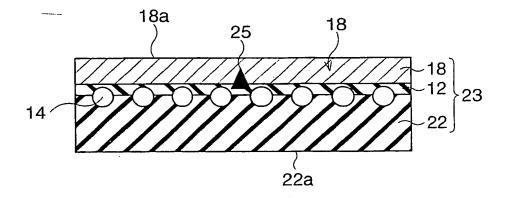


FIG. 2



. Lut.

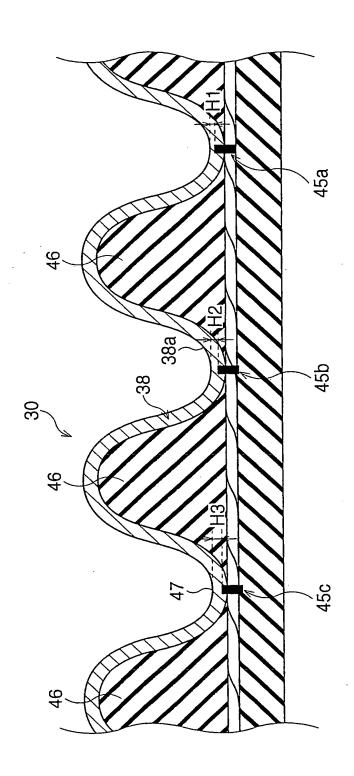


FIG. 4

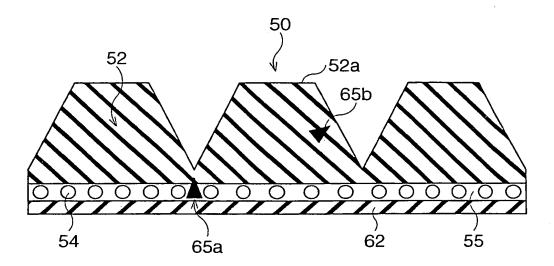


FIG. 5

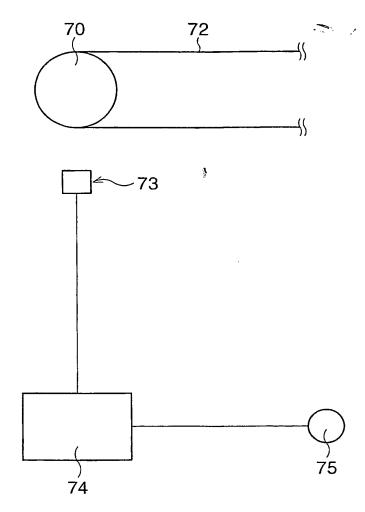


FIG. 6

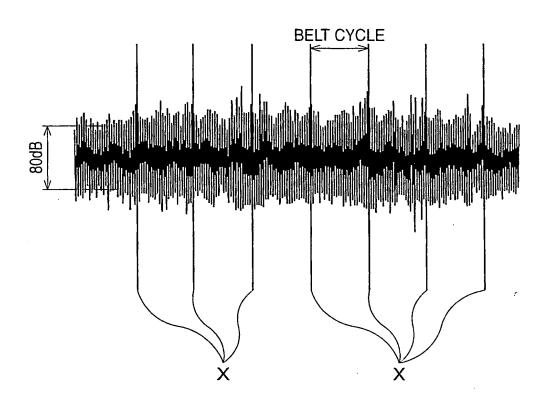
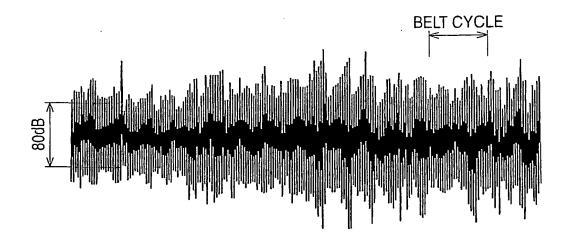


FIG. 7



INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/10612

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl7 F16G 1/00, F16G 1/28			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) Int.Cl ⁷ F16G 1/00 - 9/04			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields scarched Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2001, Japanese Registered Utility Model Gazette 1994-2001, Japanese Gazette Containing the Utility Model 1996-2001			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages Relevant to o	claim No.
x	JP 6-280943 A(MITSUBISHI E		6,7,9
	TECHNO-SERVICE CO.,LTD.) 1 (FAMILY: NONE)	994.10.07	
	CLAIM 1, FIG.1-4, PARAGRAP	н 0009-0015	
_	TD 9.242926 3/TOYOTA MOTOR	CORPORATION) 1-1	
A	JP 9-242826 A(TOYOTA MOTOR CORPORATION) 1997.09.16(FAMILY: NONE)		L <i>2</i>
	CLAIM 1,2, FIG.1		
A			L2
	annexed to the written app Japanese Utility Model App		
	No.103434/1983 (Laid-open	No.12747/1985)	
	(NISSAN MOTOR CO.,LTD) 1985.01.28, SEE THE		
	ENTIRE DOCUMENT. (FAMILY:	NONE)	
•			
Further documents are listed in the continuation of Box C. See patent family annex.			
* Special categories of cited documents: "A" document defining the general state of the art which is not considered date and not in conflict with the application but cited to understand			
to be of particular relevance "E" earlier application or patent but published on or after the international		the principle or theory underlying the invention "X" document of particular relevance; the claimed invention	n cannot be
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"O" document referring to an oral disclosure, use, exhibition or other means		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family	
Date of the actual completion of the international search		Date of mailing of the international search report	
19.11.03		02.12.03	
Name and mailing address of the ISA/JP		Authorized officer 3J	3021
Japan Patent Office		MINORU TORII	
3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Telephone No. +81-3-3581-1101 Ext. 3328	